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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/686,761	10/12/2000	Satoshi Nishiumi	723-933	6792

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EXAMINER

LIANG, REGINA

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/686,761

Applicant(s)

NISHIUMI ET AL.

Examiner

Regina Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwasaki et al (US. PAT. NO. 5,704,837 hereinafter Iwasaki) in view of Yamamoto et al (US.PAT. NO. 5,755,620).

As to claims 1, 7, Iwasaki discloses a three-dimensional image processing system, including an image processing apparatus (40 in Fig. 1) connected to a display (CRT) to generate image data for displaying an object existing in a three-dimensional space on the display according to a program, and an operating device (steering levels 12, 14) including an operating member having a base end rotatably supported and a free end operable by an operator, so that the image data is varies in accordance with movement of the operating member, wherein the operating device includes an inclination amount data output means which detects an inclination amount of the operating member to output inclination amount data (col. 3, line 10 to col. 4, line 6, col. 9), the image processing apparatus comprising a direction determining means which determines a moving direction of the object in the three-dimensional space based on the inclination amount data (col. 3, line 33 to col. 4, line 6, col. 10, lines 16-65), moving amount

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determining means which determines a moving amount of the object (co. 4, lines 30-40), a position determining means which determining a position of the object in the three-dimensional space in accordance with the moving direction and the moving amount (col. 4, lines 8-12, col. 12, lines 47-51) and an image data output means which outputs image data for displaying the object one the display at a position controlled by the position determining means (col. 4, lines 14-17).

Iwasaki does not explicitly disclose that the moving amount of the object is determined within one frame on the display. Yamamoto teaches that the moving amount of the object in a three-dimensional space on the display is determined within one display frame (Fig. 22 and col. 14, lines 48-66). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the moving amount determining means of Iwasaki to determine the moving amount of the object within one frame on the display as taught by Yamamoto so as to provide accurate and adequate control behavior of the display object in the three-dimensional space.

As to claims 2, 8, Iwasaki discloses first calculating circuitry, moving amount store, comparing circuitry, moving amount varying circuitry (image synthesizing unit 200; col. 13, lines 26-57; col. 14, line 40 to col. 15, line 16).

As to claims 3-6, 9-11, Iwasaki discloses the claimed features regarding the moving amount and moving direction at col. 10, line 34- col. 11, line 27.


As to claim 12, Iwasaki discloses the claimed features of calculating the inclination direction and determining the moving direction based on the inclination direction and a camera angle (view angle, see col. 14, lines 1-67).

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (703) 305-4719. The examiner can normally be reached on Monday-Friday from 9AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


REGINA LIANG
PRIMARY EXAMINER
ART UNIT 2674

RL
7/1/04